

Set	Items	Description
S1	6935	(DATA OR DATABASE? OR DATABANK? OR DATAFILE? OR FILE? OR INFORMATION?) (3N) (HIERARCH? OR TIER? OR MULTITIER? OR MULTILEVEL? OR TREE()) STRUCTURE? OR THREADED)
S2	153492	INDICIA OR TAG? ? OR FLAG? ? OR IDENTIFIER? OR ID OR IDS
S3	2607	S2(2N) (CHANG? OR ALTER? OR MODIF? OR FLIPFLOP? OR REWRIT?)
S4	1362483	INDEX? OR QUER? OR FINDER? OR KEY? ? OR LOCAT? OR RETRIEV? OR SEEK? OR RANK?
S5	1274472	UNIQUE? OR INDIVIDUAL? OR RECORD? OR CITATION?
S6	273911	DEEP? OR DEPTH?
S7	2	S1 AND S3 AND S4
S8	93	S3 AND S4 AND (S5 OR S6)
S9	10	S1 AND S3
S10	5	S8 AND IC=G06F-007?
S11	41	S8 AND IC=G06F?
S12	50	S7 OR S9 OR S11
S13	50	IDPAT (sorted in duplicate/non-duplicate order)
S14	49	IDPAT (primary/non-duplicate records only)
S15	44	S14 NOT AD>20020228

File 347:JAPIO Oct 1976-2003/Jul(Updated 031105)

(c) 2003 JPO & JAPIO

File 350:Derwent WPIX 1963-2003/UD,UM &UP=200374

(c) 2003 Thomson Derwent

15/5/1 (Item 1 from file: 347)
DIALOG(R)File 347:JAPIO
(c) 2003 JPO & JAPIO. All rts. reserv.

07353803 **Image available**
SCHEDULE MANAGEMENT SYSTEM

PUB. NO.: 2002-222294 [JP 2002222294 A]
PUBLISHED: August 09, 2002 (20020809)
INVENTOR(s): OGAMI KATSUHIRO
YONEKAWA KAZUTOSHI
KURIBAYASHI TETSUHIRO
OKANO NOBUYASU
MORI TETSUHIKO
APPLICANT(s): HITACHI LTD
APPL. NO.: 2001-017826 [JP 20011017826]
FILED: January 26, 2001 (20010126)
INTL CLASS: G06F-017/60; G06F-017/30

ABSTRACT

PROBLEM TO BE SOLVED: To solve the problem in the case of protecting the secrecy in a assembly unit of an organization as branch to branch in the actual society organization, wherein in the method in which an identifier has position **information** of a **tree structure** organization as attribute **information**, when a change in tree structure such as addition, deletion and migration of the identifier is caused, it is necessary to adjust the attribute information of an **identifier** causing a **change** or all **identifiers** in some case, resulting in taking much time and trouble for management.

SOLUTION: The assembly of organizations having the same uppermost organization in an organization hierarchy is divided as units. It is determined whether the unit to which a user belongs is the same as the unit to which another user belongs or not by obtaining the uppermost organization from the attribute information of the user and the attribute information of the organization, and the reference user and the user to be referred are compared in their uppermost organizations to thereby determine whether reference is right or wrong.

' 15/5/14 (Item 14 from file: 347)
DIALOG(R)File 347:JAPIO
(c) 2003 JPO & JAPIO. All rts. reserv.

03094372 **Image available**
PICTURE **RETRIEVING** DEVICE

PUB. NO.: 02-069872 [JP 2069872 A]
PUBLISHED: March 08, 1990 (19900308)
INVENTOR(s): NISHIKAWA HIROSHI
UEHARA HIROTOSHI
KOZUKA MASAYUKI
APPLICANT(s): MATSUSHITA ELECTRIC IND CO LTD [000582] (A Japanese Company
or Corporation), JP (Japan)
APPL. NO.: 63-221748 [JP 88221748]
FILED: September 05, 1988 (19880905)
INTL CLASS: [5] **G06F-015/40**
JAPIO CLASS: 45.4 (INFORMATION PROCESSING -- Computer Applications)
JOURNAL: Section: P, Section No. 1056, Vol. 14, No. 260, Pg. 27, June
05, 1990 (19900605)

ABSTRACT

PURPOSE: To inform the deletion of the objective information to be **retrieved** of code information which structured information in question has by changing the display form of the structured information in the case of the deletion, etc., of the objective information to be **retrieved** of the code information the structured information has.

CONSTITUTION: The tabulated data of the picture (picture ID=2) of an article3 is deleted from a picture information control **record**. Next, in a structured information control **record**, the **key** word 'article3' of the structured information ID=1 is **changed**. At that time, the **key** word to be written in the **key** word of the structured information ID=1 is selected from a display control code to be controlled by a structured information display control **record**. In this case, as for contents to be changed, 'sale' is written as the **key** word of the structured information ID=1 in order to deal with sale. Thus, a fact that the picture to be **retrieved** by the code information the structured information of the picture has was deleted can be known by a user by only looking at the display form of the structured information.

15/5/16 (Item 1 from file: 350)
DIALOG(R) File 350:Derwent WPIX
(c) 2003 Thomson Derwent. All rts. reserv.

015544534 **Image available**
WPI Acc No: 2003-606690/200357
XRPX Acc No: N03-483713

Reverse index updating method for electronic document retrieval application, involves partitioning index and modifying data on indexed portions using change log file, while concurrently providing access to other portions

Patent Assignee: KABRA N (KABR-I); RAMAKRISHNAN R (RAMA-I); SHAFT U (SHAF-I)

Inventor: KABRA N; RAMAKRISHNAN R; SHAFT U
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 20030101183	A1	20030529	US 2001994138	A	20011126	200357 B

Priority Applications (No Type Date): US 2001994138 A 20011126

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
US 20030101183	A1	16	G06F-017/30	

Abstract (Basic): US 20030101183 A1

NOVELTY - A change log file (48) stores update information to be made in **index** (14) and includes time stamp (52), keyword (54), document **identifier** (56) and **change** code (58) for the new document to indicate whether the existing data of the main portion (24) is to be deleted or added. The supplemental portion (26) of the **index** are modified **individually** with the corresponding changes, while enabling access to the other supplemental portions.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (1) electronic document updating system; and
- (2) electronic document **retrieval** system.

USE - For online electronic document **retrieval** system (claimed).

ADVANTAGE - Facilitates the updating of electronic documents at high speed causing disruption to user by updating the **index**, while providing concurrent usage of the **index**.

DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of the electronic document updating system.

index (14)
portions (24,26)
document (42)
change log file (48)
time stamp (52)
keyword (54)
document identifier (56)
change code (58)
pp; 16 DwgNo 2/10

Title Terms: REVERSE; **INDEX**; UPDATE; METHOD; ELECTRONIC; DOCUMENT;
RETRIEVAL; APPLY; PARTITION; **INDEX**; MODIFIED; DATA; **INDEX**; PORTION;
CHANGE; LOG; FILE; CONCURRENT; ACCESS; PORTION

Derwent Class: T01

International Patent Class (Main): G06F-017/30

International Patent Class (Additional): G06F-007/00

File Segment: EPI

15/5/21 (Item 6 from file: 350)
DIALOG(R) File 350:Derwent WPIX
(c) 2003 Thomson Derwent. All rts. reserv.

013918438 **Image available**
WPI Acc No: 2001-402651/200143
XRPX Acc No: N01-297156

Computer stores identifier indicating detected change in stored
program data of preset size, corresponding to pressing of keyboard, mouse
key and writes program data to external memory based on stored
identifier

Patent Assignee: CASIO COMPUTER CO LTD (CASK)
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 2001125814	A	20010511	JP 99305119	A	19991027	200143 B

Priority Applications (No Type Date): JP 99305119 A 19991027

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
JP 2001125814	A		8 G06F-012/00	

Abstract (Basic): JP 2001125814 A

NOVELTY - Memory section (3a) of random access memory (3), stores
operating system program data that is divided into data of preset size.
When detector detects change in stored data corresponding to detected
pressing of keyboard, mouse **key**, the identifier indicating detection
result is stored in memory section (3b). A control unit writes the data
in memory section (3a) into external memory based on stored identifier.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for
recording medium.

USE - Computer with data storage control function such as notebook
personal computer, etc.

ADVANTAGE - The data is stored in external memory within a short
time, by enabling storage of identifiers in memory section. Since data
is divided into preset size and stored in memory section, the capacity
of memory section storing the identifier is reduced.

DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of
computer. (Drawing includes non-English language text).

Random access memory (3)

Memory sections (3a, 3b)

pp; 8 DwgNo 1/5

Title Terms: COMPUTER; STORAGE; IDENTIFY; INDICATE; DETECT; CHANGE; STORAGE
; PROGRAM; DATA; PRESET; SIZE; CORRESPOND; PRESS; KEYBOARD; MOUSE; **KEY** ;
WRITING; PROGRAM; DATA; EXTERNAL; MEMORY; BASED; STORAGE; IDENTIFY

Derwent Class: T01

International Patent Class (Main): G06F-012/00

International Patent Class (Additional): G06F-003/06 ; G06F-012/16

File Segment: EPI

' 15/5/23 (Item 8 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2003 Thomson Derwent. All rts. reserv.

013178566 **Image available**
WPI Acc No: 2000-350439/200030
XRPX Acc No: N00-262595

**Web sharable database creating system has spatial indexer , which
generates spatial indices for records , based on recognized addressing
information in data**

Patent Assignee: VICINITY CORP (VICI-N)
Inventor: ASPINWALL D C; HALSTEAD G F
Number of Countries: 090 Number of Patents: 003
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200023862	A2	20000427	WO 99US23874	A	19991014	200030 B
AU 200013134	A	20000508	AU 200013134	A	19991014	200037
US 6363392	B1	20020326	US 98173983	A	19981016	200226

Priority Applications (No Type Date): US 98173983 A 19981016
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 200023862	A2	E	62	G06F-000/00	

Designated States (National): AE AL AM AT AU AZ BA BB BG BR BY CA CH CN
CR CU CZ DE DK DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP
KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE
SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR
IE IT KE LS LU MC MW NL OA PT SD SE SL SZ TZ UG ZW

AU 200013134	A	G06F-000/00	Based on patent WO 200023862
US 6363392	B1	G06F-017/30	

Abstract (Basic): WO 200023862 A2

NOVELTY - A database manager (18) receives data from a network and processes data into a series of **records** for the database. A spatial **indexer** generates spatial indices for **records** based on recognized addressing information in data to associate geographic **location** with each **record**. Data with spatial indices is stored so that it is accessible over the network.

DETAILED DESCRIPTION - The database manager analyses the format of the data and maintains the format in the storage. The spatial **indexer** comprises an address extractor (20) to extract address information from the data, and a geocoder (24) to geocode the addressing information. An INDEPENDENT CLAIM is also included for web-sharable personal database providing method.

USE - For creating and using spatially related user created databases sharable over the web in Internet.

ADVANTAGE - Translating of wide variety of formatting tags into smaller set of **modified tags** or characters significantly reduces the coding complexity and execution overhead of address extractor. Hence a flexible web base database is provided at low cost and geographical interrelation among the database entries is possible.

DESCRIPTION OF DRAWING(S) - The figure shows block diagram of system for providing web-sharable personal database.

Database manager (18)
Address extractor (20)
Geocoder (24)

pp; 62 DwgNo 1/15

Title Terms: WEB; DATABASE; SYSTEM; SPACE; **INDEX** ; GENERATE; SPACE; **INDEX**
; **RECORD** ; BASED; ADDRESS; INFORMATION; DATA

Derwent Class: T01

International Patent Class (Main): G06F-000/00 ; G06F-017/30

File Segment: EPI

15/5/24 (Item 9 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2003 Thomson Derwent. All rts. reserv.

012438023 **Image available**
WPI Acc No: 1999-244131/199920
XRPX Acc No: N99-181664

Persistent-update sequence numbers of monitoring document file changes of a file system

Patent Assignee: MICROSOFT CORP (MICR-N)
Inventor: PELTONEN K G; RAJU S C V; SHOROFF S
Number of Countries: 020 Number of Patents: 004
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 9914692	A1	19990325	WO 98US19048	A	19980911	199920 B
US 6067541	A	20000523	US 97932714	A	19970917	200032
EP 1023677	A1	20000802	EP 98946055	A	19980911	200038
			WO 98US19048	A	19980911	
JP 2001516928	W	20011002	WO 98US19048	A	19980911	200172
			JP 2000512158	A	19980911	

Priority Applications (No Type Date): US 97932714 A 19970917

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 9914692	A1	E	47	G06F-017/30	
				Designated States (National):	DE GB JP
				Designated States (Regional):	AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
US 6067541	A			G06F-017/30	
EP 1023677	A1	E		G06F-017/30	Based on patent WO 9914692
				Designated States (Regional):	DE FR GB
JP 2001516928	W		49	G06F-017/30	Based on patent WO 9914692

Abstract (Basic): WO 9914692 A1

NOVELTY - A file system (64) of documents serially stores document change information in a persistent log of **records** (62). A **record** is read from the file system's persistent log and processed to obtain a document **identifier**, document **change** information, and a **unique** sequence number. This **unique** sequence number represents the relative position of the **record** on the log, and hence the relative time of the change. A change-monitoring program, such as an **index** server (60), is updated by the document change information stored in the log **record**. The sequence number of the highest **record** processed is **recorded** in a persistent data structure (74). In the event of shutdown of the updating or monitoring, upon restart, the sequence number is **retrieved** from the persistent data structure, and the program is updated by reading **records** from the log based on the sequence number.

USE - For any type of program that monitors changes to the document files of a file system, such as an **index** program, a backup program, or a replication program.

ADVANTAGE - Allows change-monitoring programs, such as an **indexer**, to be efficiently maintained and rapidly updated.

DESCRIPTION OF DRAWING(S) - The figure shows a block diagram showing typical components of the invention.

Index server (60)

Record log (62)

File system (64)

Persistent data structure. (74)

pp; 47 DwgNo 2/11

Title Terms: UPDATE; SEQUENCE; NUMBER; MONITOR; DOCUMENT; FILE; CHANGE; FILE; SYSTEM

Derwent Class: T01

International Patent Class (Main): G06F-017/30

International Patent Class (Additional): G06F-012/00

File Segment: EPI

15/5/29 (Item 14 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2003 Thomson Derwent. All rts. reserv.

011013451 **Image available**
WPI Acc No: 1996-510401/199651
XRPX Acc No: N96-430271

**Image searching method for ID data e.g. photographed-object name,
photography date - by showing desired class ID data among changed
hierarchical ID data as list at cathode-ray tube using list display
unit**

Patent Assignee: FUJI PHOTO FILM CO LTD (FUJF)
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 8263571	A	19961011	JP 9563896	A	19950323	199651 B

Priority Applications (No Type Date): JP 9563896 A 19950323

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
JP 8263571	A	7	G06F-019/00	

Abstract (Basic): JP 8263571 A

The method involves searching all ID data of an image in which a specific ID data is added through a searching unit (3). The searched ID data are sequentially classified by a classifying circuit (4) in a desired kind of order from a desired ID data which is among the **changed hierarchical ID data**.

A desired class ID data is shown by a list display unit (5) as a list at a cathode-ray tube (7).

ADVANTAGE - Easily searches image data even when kinds of ID data increases.

Dwg.1/6

Title Terms: IMAGE; SEARCH; METHOD; ID; DATA; PHOTOGRAPH; OBJECT; NAME;
PHOTOGRAPH; DATE; CLASS; ID; DATA; CHANGE; HIERARCHY; ID; DATA; LIST;
CATHODE; RAY; TUBE; LIST; DISPLAY; UNIT

Derwent Class: P31; S05; T01

International Patent Class (Main): G06F-019/00

International Patent Class (Additional): A61B-005/00; G06F-003/14;

G06F-017/30

File Segment: EPI; EngPI

Set	Items	Description
S1	6935	(DATA OR DATABASE? OR DATABANK? OR DATAFILE? OR FILE? OR INFORMATION?) (3N) (HIERARCH? OR TIER? OR MULTITIER? OR MULTILEVEL? OR TREE()) STRUCTURE? OR THREADED)
S2	153492	INDICIA OR TAG? ? OR FLAG? ? OR IDENTIFIER? OR ID OR IDS
S3	126	S1(2N) (CHANGE? OR ALTER? OR MODIF? OR FLIPFLOP? OR REWRIT?)
S4	1362483	INDEX? OR QUER? OR FINDER? OR KEY? ? OR LOCAT? OR RETRIEV? OR SEEK? OR RANK?
S5	10	S1 AND S2 AND S3
S6	22	S3 AND S4
S7	32	S5 OR S6
S8	28	S7 AND IC=G06F?
S9	28	IDPAT (sorted in duplicate/non-duplicate order)

File 347:JAPIO Oct 1976-2003/Jul(Updated 031105)
(c) 2003 JPO & JAPIO

File 350:Derwent WPIX 1963-2003/UD,UM &UP=200374
(c) 2003 Thomson Derwent

9/5/28 (Item 28 from file: 347)
DIALOG(R)File 347:JAPIO
(c) 2003 JPO & JAPIO. All rts. reserv.

01937682 **Image available**
FORMATION OF LOGIC OPERATION CIRCUIT

PUB. NO.: 61-151782 [JP 61151782 A]
PUBLISHED: July 10, 1986 (19860710)
INVENTOR(s): MORITA MASATO
IKARIYA YUKIO
SAKATAYA YOSHINORI
MIYOSHI MASAYUKI
APPLICANT(s): HITACHI LTD [000510] (A Japanese Company or Corporation), JP
(Japan)
APPL. NO.: 59-272866 [JP 84272866]
FILED: December 26, 1984 (19841226)
INTL CLASS: [4] G06F-015/60
JAPIO CLASS: 45.4 (INFORMATION PROCESSING -- Computer Applications)
JOURNAL: Section: P, Section No. 521, Vol. 10, No. 354, Pg. 51,
November 28, 1986 (19861128)

ABSTRACT

PURPOSE: To hold a logic equivalent characteristic by changing partially these when higher **rank hierarchical data** and lower **rank hierarchical data** are changed by a design change, in the system having multi hierarchical circuit data.

CONSTITUTION: When higher **rank hierarchical data** 100 are changed to lower **rank hierarchical data** 300 by the design change, logic comparison is executed. Namely, first, an identifying code ID2 is checked concerning overs and shorts of an identifying code, and second, identifying codes ID1 and ID3 are checked concerning overs and shorts of the input output signal of a logical set. Third, a pool system comparison of an output signal of a logic set is executed, the logic set of the code ID1 is logically equivalent, and the logical set of ID3 is verified to be dissident logically. Thus, the logic set of the lower **rank hierarchical logic** having the code ID1 is preserved, the logic set of the lower **rank hierarchical logic** having the code ID2 is deleted and the logical set having the code ID3 is redeveloped and replaced from the higher **rank hierarchical logic**. Thus, by changing partially, the logic equivalent characteristic can be kept.

9/5/6 (Item 6 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2003 Thomson Derwent. All rts. reserv.

013595037 **Image available**
WPI Acc No: 2001-079244/200109
XRPX Acc No: N01-060287

Retrieving information from database record with several fields,
involves forming database query according to action control element
selections obtained from integrated active information documents

Patent Assignee: LOWRY SOFTWARE INC (LOWR-N)

Inventor: LOWRY D D

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 6128617	A	20001003	US 97977368	A	19971124	200109 B

Priority Applications (No Type Date): US 97977368 A 19971124

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 6128617	A		26	G06F-017/30	

Abstract (Basic): US 6128617 A

NOVELTY - The method involves rendering successive integrated active information documents on a display screen. Control element selections of particular action elements are obtained from the successive integrated active information documents. A database query is formed according to the action control element selections.

DETAILED DESCRIPTION - Action control elements are integrated into the information in the document, and correspond to the fields of the database record. The information of the successive integrated active information documents corresponds to the control element selections made from preceding integrated active information documents. An INDEPENDENT CLAIM is also included for a computer readable medium storing the software instructions for retrieving information from the database record with several fields.

USE - For presenting computer users with information with integrated actions and links for improved access to information.

ADVANTAGE - Presents information to users in a format that improves understanding of relationships between information using hierarchical graphical listing computer software. Allows simple retrieval of information from complex database record with several fields. Enables modification of information of successive hierarchical graphical listings according to sequence of selections. Integrates actions with information in hierarchical graphical listing, table or spreadsheet, providing a wide variety of formats for presenting and accessing information.

DESCRIPTION OF DRAWING(S) - The figure shows the exemplary vertical format chart rendered on a display to represent hierarchical graphical listing of related information.

pp; 26 DwgNo 2/13

Title Terms: RETRIEVAL ; INFORMATION; DATABASE; RECORD; FIELD; FORMING;
DATABASE; QUERY ; ACCORD; ACTION; CONTROL; ELEMENT; SELECT; OBTAIN;
INTEGRATE; ACTIVE; INFORMATION; DOCUMENT

Derwent Class: T01

International Patent Class (Main): G06F-017/30

File Segment: EPI

9/5/12 (Item 12 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2003 Thomson Derwent. All rts. reserv.

011013451 **Image available**
WPI Acc No: 1996-510401/199651
XRPX Acc No: N96-430271

**Image searching method for ID data e.g. photographed-object name,
photography date - by showing desired class ID data among changed
hierarchical ID data as list at cathode-ray tube using list display
unit**

Patent Assignee: FUJI PHOTO FILM CO LTD (FUJF)
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 8263571	A	19961011	JP 9563896	A	19950323	199651 B

Priority Applications (No Type Date): JP 9563896 A 19950323

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
JP 8263571	A	7	G06F-019/00	

Abstract (Basic): JP 8263571 A

The method involves searching all **ID** data of an image in which a specific **ID** data is added through a searching unit (3). The searched **ID** data are sequentially classified by a classifying circuit (4) in a desired kind of order from a desired **ID** data which is among the **changed hierarchical ID data**.

A desired class **ID** data is shown by a list display unit (5) as a list at a cathode-ray tube (7).

ADVANTAGE - Easily searches image data even when kinds of **ID** data increases.

Dwg.1/6

Title Terms: IMAGE; SEARCH; METHOD; **ID** ; DATA; PHOTOGRAPH; OBJECT; NAME;
PHOTOGRAPH; DATE; CLASS; **ID** ; DATA; CHANGE; HIERARCHY; **ID** ; DATA; LIST;
CATHODE; RAY; TUBE; LIST; DISPLAY; UNIT

Derwent Class: P31; S05; T01

International Patent Class (Main): **G06F-019/00**

International Patent Class (Additional): A61B-005/00; **G06F-003/14** ;

G06F-017/30

File Segment: EPI; EngPI

9/5/14 (Item 14 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2003 Thomson Derwent. All rts. reserv.

010680039 **Image available**
WPI Acc No: 1996-176994/199618
XRPX Acc No: N96-148690

**Data reference system dynamic index production device for computer -
has management information file production mechanism which generates
management information file that stores data file name, index file
name, and index degree**

Patent Assignee: NEC CORP (NIDE)
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 8055050	A	19960227	JP 94187460	A	19940809	199618 B

Priority Applications (No Type Date): JP 94187460 A 19940809

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
JP 8055050	A	6	G06F-012/00	

Abstract (Basic): JP 8055050 A

The device has an optimum **index** degree determination mechanism (1) which compares the **index** degree of a hierarchical type **index** file with an involution solution calculation system according to the variation of data file (4) which becomes reference object in data reference system by a computer. An **index** file production mechanism (2) sequentially generates an **index** file (5) in a storing system, with a class for the degree determined by the optimum **index** degree determination mechanism.

The **index** file is then associated to the data file in which data is stored. It has a management information file production mechanism (3) to generate a data file name, an **index** file name, and a management information file (6) which is a sequential file from which the **index** degree is stored.

ADVANTAGE - Changes production of hierarchical type index file according to several data records. Improves speed of data reference processing. Provides device which easily processes several dynamic **index**. Decides several optimum hierarchy which can automatically process reference data more efficiently.

Dwg.1/6

Title Terms: DATA; REFERENCE; SYSTEM; DYNAMIC; **INDEX** ; PRODUCE; DEVICE; COMPUTER; MANAGEMENT; INFORMATION; FILE; PRODUCE; MECHANISM; GENERATE; MANAGEMENT; INFORMATION; FILE; STORAGE; DATA; FILE; NAME; **INDEX** ; FILE; NAME; **INDEX** ; DEGREE

Derwent Class: T01

International Patent Class (Main): G06F-012/00

International Patent Class (Additional): G06F-017/30

File Segment: EPI

9/5/21 (Item 21 from file: 347)
DIALOG(R)File 347:JAPIO
(c) 2003 JPO & JAPIO. All rts. reserv.

07353803 **Image available**
SCHEDULE MANAGEMENT SYSTEM

PUB. NO.: 2002-222294 [JP 2002222294 A]
PUBLISHED: August 09, 2002 (20020809)
INVENTOR(s): OGAMI KATSUHIRO
YONEKAWA KAZUTOSHI
KURIBAYASHI TETSUHIRO
OKANO NOBUYASU
MORI TETSUHIKO
APPLICANT(s): HITACHI LTD
APPL. NO.: 2001-017826 [JP 20011017826]
FILED: January 26, 2001 (20010126)
INTL CLASS: G06F-017/60 ; G06F-017/30

ABSTRACT

PROBLEM TO BE SOLVED: To solve the problem in the case of protecting the secrecy in a assembly unit of an organization as branch to branch in the actual society organization, wherein in the method in which an **identifier** has position **information** of a **tree structure** organization as attribute **information**, when a **change** in tree structure such as addition, deletion and migration of the **identifier** is caused, it is necessary to adjust the attribute information of an **identifier** causing a change or all **identifiers** in some case, resulting in taking much time and trouble for management.

SOLUTION: The assembly of organizations having the same uppermost organization in an organization hierarchy is divided as units. It is determined whether the unit to which a user belongs is the same as the unit to which another user belongs or not by obtaining the uppermost organization from the attribute information of the user and the attribute information of the organization, and the reference user and the user to be referred are compared in their uppermost organizations to thereby determine whether reference is right or wrong.

COPYRIGHT: (C)2002,JPO

9/5/24 (Item 24 from file: 347)
DIALOG(R)File 347:JAPIO
(c) 2003 JPO & JAPIO. All rts. reserv.

04350542 **Image available**
TECHNIQUE CHANGE CONTROL SYSTEM FOR DELIVERY PRODUCT

PUB. NO.: 05-342242 [JP 5342242 A]
PUBLISHED: December 24, 1993 (19931224)
INVENTOR(s): OKAMI MOTOKO
APPLICANT(s): NEC CORP [000423] (A Japanese Company or Corporation), JP
(Japan)
APPL. NO.: 04-177502 [JP 92177502]
FILED: June 11, 1992 (19920611)
INTL CLASS: [5] **G06F-015/24 ; G06F-015/60**
JAPIO CLASS: 45.4 (INFORMATION PROCESSING -- Computer Applications)
JOURNAL: Section: P, Section No. 1719, Vol. 18, No. 184, Pg. 5, March
29, 1994 (19940329)

ABSTRACT

PURPOSE: To improve the processing speed of an editing processing and a statistical list output processing by reducing the capacity of a delivery product information file and a technique change information file which are required for containing a same information amount.

CONSTITUTION: The delivery product information file 6 and the technique change information file 7 are provided with delivery product information and technique **change information** of multi- **hierarchical** structure. An editing part 5 executes the respective editing processings such as registering, updating, removing and **retrieving** for the delivery product information file 6 and the technique change information file 7 based on an instruction from an input/output device 8. An input information collating part 3 extracts record being required for generating statistical information from the delivery product information file 6 and the technique change information file 7 based on the instruction from the input/ output device 8. A statistical information generating part 4 generates statistical information to be the base of a statistical list 9. A data input/output part 2 controls the output of the statistical list 9 based on statistical information, etc.

15/5/42 (Item 27 from file: 350)
DIALOG(R) File 350:Derwent WPIX
(c) 2003 Thomson Derwent. All rts. reserv.

007144859
WPI Acc No: 1987-144856/198721
XRPX Acc No: N87-108670

**Main storage access control system for virtual computer - has register
storing addresses for accessing main store and selector of address
registers designated by tag bits for changing address mode**

Patent Assignee: FUJITSU LTD (FUIT)
Inventor: MATSUMOTO T
Number of Countries: 008 Number of Patents: 007

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 223551	A	19870527	EP 86308805	A	19861112	198721 B
AU 8664878	A	19870625				198732
BR 8605598	A	19870818				198738
US 4782443	A	19881101	US 86926796	A	19861113	198846
CA 1280829	C	19910226				199114
EP 223551	B1	19930331	EP 86308805	A	19861112	199313
DE 3688177	G	19930506	DE 3688177	A	19861112	199319
			EP 86308805	A	19861112	

Priority Applications (No Type Date): JP 85254029 A 19851113; JP 85254027 A 19851113

Cited Patents: 1.Jnl.Ref; A3...8949; EP 106572; EP 58844; No-SR.Pub

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 223551	A	E	17		
Designated States (Regional): DE ES FR GB					
US 4782443	A		9		
EP 223551	B1	E	12	G06F-012/02	
Designated States (Regional): DE ES FR GB					
DE 3688177	G			G06F-012/02	Based on patent EP 223551

Abstract (Basic): EP 223551 A

The address for accessing the main store is determined from data stored in the designation part (19) of the address register and from the displacement part (20) of an instruction operand stored in the instruction register (18). The tag bits of the tag register (30) are selected by the selector (33) under the control of the address register designation part (19).

If the virtual machine monitoring region (42) determines that virtual machine regions (41) are to be accessed the designation bit (25A) which designates a 24 bits mode for memory address length, of the program status word register (25) is supplied to the access control portion (10) by the access detection portion (31).

ADVANTAGE - Appropriate address mode for virtual machine computing function in use is set by output signal of selector so that control efficiency is optimum.

Title Terms: MAIN; STORAGE; ACCESS; CONTROL; SYSTEM; VIRTUAL; COMPUTER; REGISTER; STORAGE; ADDRESS; ACCESS; MAIN; STORAGE; SELECT; ADDRESS; REGISTER; DESIGNATED; TAG; BIT; CHANGE; ADDRESS; MODE

Derwent Class: T01

International Patent Class (Main): G06F-012/02

International Patent Class (Additional): G06F-012/14

File Segment: EPI

Set	Items	Description
S1	17687	(DATA OR DATABASE? OR DATABANK? OR DATAFILE? OR FILE? OR INFORMATION?) (3N) (HIERARCH? OR TIER? OR MULTITIER? OR MULTILEVEL? OR TREE()) STRUCTURE? OR THREADED)
S2	105711	INDICIA OR TAG? ? OR FLAG? ? OR IDENTIFIER? OR ID OR IDS
S3	74	S1(2N) (CHANGE? OR ALTER? OR MODIF? OR FLIPFLOP? OR REWRIT?)
S4	2968400	INDEX? OR QUER? OR FINDER? OR KEY? ? OR LOCAT? OR RETRIEV? OR SEEK? OR RANK?
S5	0	S1 AND S2 AND S3
S6	26	S3 AND S4
S7	26	S5 OR S6
S8	0	S7 AND IC=G06F?
S9	69	S1 AND S2 AND S4
S10	7	S1(5N) S2 AND S4
S11	33	S6 OR S10
S12	26	RD (unique items)
S13	24	S12 NOT PY>2002
S14	24	S13 NOT PD>20020228
File	8: Ei Compendex(R)	1970-2003/Nov W2 (c) 2003 Elsevier Eng. Info. Inc.
File	35: Dissertation Abs Online	1861-2003/Oct (c) 2003 ProQuest Info&Learning
File	202: Info. Sci. & Tech. Abs.	1966-2003/Nov 17 (c) 2003 EBSCO Publishing
File	65: Inside Conferences	1993-2003/Nov W3 (c) 2003 BLDSC all rts. reserv.
File	2: INSPEC	1969-2003/Nov W2 (c) 2003 Institution of Electrical Engineers
File	94: JICST-EPlus	1985-2003/Nov W3 (c) 2003 Japan Science and Tech Corp(JST)
File	233: Internet & Personal Comp. Abs.	1981-2003/Jul (c) 2003, EBSCO Pub.
File	.144: Pascal	1973-2003/Nov W2 (c) 2003 INIST/CNRS
File	34: SciSearch(R) Cited Ref Sci	1990-2003/Nov W3 (c) 2003 Inst for Sci Info
File	99: Wilson Appl. Sci & Tech Abs	1983-2003/Oct (c) 2003 The HW Wilson Co.

14/5/3 (Item 3 from file: 8)
DIALOG(R)File 8: Ei Compendex(R)
(c) 2003 Elsevier Eng. Info. Inc. All rts. reserv.

04750837 E.I. No: EIP97073731182

Title: Meaningful change detection in structured data

Author: Chawathe, Sudarshan S.; Garcia-Molina, Hector

Corporate Source: Stanford Univ, Stanford, CA, USA

Conference Title: Proceedings of the 1997 ACM SIGMOD International
Conference on Management of Data

Conference Location: Tucson, AZ, USA Conference Date: 19970513-19970515

E.I. Conference No.: 46616

Source: SIGMOD Record (ACM Special Interest Group on Management of Data)
v 26 n 2 June 1997. ACM, Fort Collins, CO, USA. p 26-37

Publication Year: 1997

CODEN: SRECD8 ISSN: 0163-5808

Language: English

Document Type: CA; (Conference Article) Treatment: G; (General Review);
T; (Theoretical)

Journal Announcement: 9709W1

Abstract: Detecting changes by comparing data snapshots is an important requirement for difference **queries**, active databases, and version and configuration management. In this paper we focus on detecting meaningful **changes** in **hierarchically** structured **data**, such as nested-object data. This problem is much more challenging than the corresponding one for relational or flat-file data. In order to describe changes better, we base our work not just on the traditional 'atomic' insert, delete, update operations, but also on operations that move an entire sub-tree of nodes, and that copy an entire sub-tree. These operations allows us to describe changes in a semantically more meaningful way. Since this change detection problem is NP-hard, in this paper we present a heuristic change detection algorithm that yields close to 'minimal' descriptions of the changes, and that has fewer restrictions than previous algorithms. Our algorithm is based on transforming the change detection problem to a problem of computing a minimum-cost edge cover of a bipartite graph. We study the quality of the solution produced by our algorithm, as well as the running time, both analytically and experimentally. (Author abstract) 17 Refs.

Descriptors: *Data structures; Trees (mathematics); Algorithms; Nonlinear programming; Heuristic methods; Data processing; Database systems; Computational complexity; Computational linguistics

Identifiers: Nested object data

Classification Codes:

723.2 (Data Processing); 921.4 (Combinatorial Mathematics, Includes Graph Theory, Set Theory); 921.5 (Optimization Techniques); 723.3 (Database Systems); 721.1 (Computer Theory, Includes Formal Logic, Automata Theory, Switching Theory, Programming Theory)

723 (Computer Software); 921 (Applied Mathematics); 721 (Computer Circuits & Logic Elements)

72 (COMPUTERS & DATA PROCESSING); 92 (ENGINEERING MATHEMATICS)

14/5/5 (Item 5 from file: 8)

DIALOG(R)File 8:Ei Compendex(R)

(c) 2003 Elsevier Eng. Info. Inc. All rts. reserv.

04623705 E.I. No: EIP97023519652

Title: Change **detection in** hierarchically **structured** information
Author: Chawathe, Sudarshan S.; Rajaraman, Anand; Garcia-Molina, Hector;
Widom, Jennifer

Corporate Source: Stanford Univ, Stanford, CA, USA

Conference Title: Proceedings of the 1996 ACM SIGMOD International
Conference on Management of Data

Conference Location: Montreal, Can Conference Date: 19960604-19960606

Sponsor: ACM SIGMOD

E.I. Conference No.: 45963

Source: SIGMOD Record (ACM Special Interest Group on Management of Data)

v 25 n 2 June 1996.. p 493-504

Publication Year: 1996

CODEN: SRECD8

Language: English

Document Type: CA; (Conference Article) Treatment: G; (General Review);
T; (Theoretical)

Journal Announcement: 9704W1

Abstract: Detecting and representing changes to data is important for active databases, data warehousing, view maintenance, and version and configuration management. Most previous work in change management has dealt with flat-file and relational data; we focus on hierarchically structured data. Since in many cases changes must be computed from old and new versions of the **data**, we define the **hierarchical change** detection problem as the problem of finding a 'minimum-cost edit script' that transforms one data tree to another, and we present efficient algorithms for computing such an edit script. Our algorithms make use of some **key** domain characteristics to achieve substantially better performance than previous, general-purpose algorithms. We study the performance of our algorithms both analytically and empirically, and we describe the application of our techniques to hierarchically structured documents. (Author abstract) 16 Refs.

Descriptors: *Data structures; Structured programming; Hierarchical systems; Database systems; Algorithms; Problem solving; Trees (mathematics); Mathematical transformations

Identifiers: Hierarchical **change** detection; **Hierarchically** structured **data**

Classification Codes:

723.2 (Data Processing); 723.3 (Database Systems); 723.1 (Computer Programming); 921.4 (Combinatorial Mathematics, Includes Graph Theory, Set Theory)

723 (Computer Software); 921 (Applied Mathematics)

72 (COMPUTERS & DATA PROCESSING); 92 (ENGINEERING MATHEMATICS)

14/5/9 (Item 9 from file: 8)
DIALOG(R) File 8: Ei Compendex(R)
(c) 2003 Elsevier Eng. Info. Inc. All rts. reserv.

03940331 E.I. No: EIP94091397269

Title: Multitrees: enriching and reusing hierarchical structure

Author: Furnas, George W.; Zacks, Jeff

Corporate Source: Bell Communications Research, Morristown, NJ, USA

Conference Title: Proceedings of the CHI'94 Conference on Human Factors
in Computing Systems

Conference Location: Boston, MA, USA Conference Date: 19940424-19940428

Sponsor: ACM; SIGCHI; Microsoft; IBM; NYNEX; et al

E.I. Conference No.: 20688

Source: Celebrating Independance Conference Proceedings on Human Factors
in Computing Systems 1994. Publ by ACM, New York, NY, USA. p 330-336

Publication Year: 1994

CODEN: 001318 ISBN: 0-201-76557-8

Language: English

Document Type: CA; (Conference Article) Treatment: T; (Theoretical); A;
(Applications)

Journal Announcement: 9410W4

Abstract: This paper introduces multitrees, a new type of structure for
representing information. Multitrees are a class of directed acyclic graphs
(DAGs) with the unusual property that they have large easily identifiable
substructures that are trees. These subtrees have a natural semantic
interpretation providing **alternate hierarchical** contexts for
information, as well as providing a natural model for hierarchical reuse.
The numerous trees found within multitrees also afford familiar, tree-based
graphical interactions. (Author abstract) 8 Refs.

Descriptors: Information **retrieval**; Trees (mathematics); Computer
software; Computer graphics; Information dissemination; Information
analysis

Identifiers: Information graphs; Hierarchies; Directed graphs; Hypertext

Classification Codes:

722 (Computer Hardware); 723 (Computer Software); 921 (Applied
Mathematics); 903 (Information Science)

72 (COMPUTERS & DATA PROCESSING); 92 (ENGINEERING MATHEMATICS); 90
(GENERAL ENGINEERING)

14/5/10 (Item 10 from file: 8)
DIALOG(R)File 8: Ei Compendex(R)
(c) 2003 Elsevier Eng. Info. Inc. All rts. reserv.

03864113 E.I. No: EIP94051293899

Title: On the selection of optimal index configuration in OO databases
Author: Choenni, Sunil; Bertino, Elisa; Blanken, Henk M.; Chang, Thiel
Corporate Source: Univ of Twente, Enschede, Neth
Conference Title: Proceedings of the 10th International Conference on Data Engineering

Conference Location: Houston, TX, USA **Conference Date:** 19940214-19940218

Sponsor: IEEE Computer Society

E.I. Conference No.: 20218

Source: Proceedings - International Conference on Data Engineering 1994.
Publ by IEEE, Computer Society Press, Los Alamitos, CA, USA, 93CH3383-7. p 526-537

Publication Year: 1994

CODEN: PIDEEG **ISBN:** 0-8186-5400-7

Language: English

Document Type: CA; (Conference Article) **Treatment:** A; (Applications)

Journal Announcement: 9407W1

Abstract: An operation in object-oriented databases gives rise to the processing of a path. Several database operations may result into the same path. We address the problem of optimal **index** configuration for a single path. As it will be shown an optimal **index** configuration for a path can be achieved by splitting the path into subpaths and by **indexing** each subpath with the optimal **index** organization. We present an algorithm which is able to select an optimal **index** configuration for a given path. For the moment we consider a limited number of existing **indexing** techniques (simple **index**, inherited **index**, nested inherited **index**, multi-**index**, and multi-inherited **index**) but the principles of the algorithm will remain the same adding more **indexing** techniques. (Author abstract) 12 Refs.

Descriptors: Database systems; Object oriented programming; Data structures; **Indexing** (of information); Optimal systems; Algorithms; Hierarchical systems; Magnetic disk storage; Critical path analysis; Equivalence classes

Identifiers: Optimal **index** configuration; Object oriented **database** systems; Aggregation **hierarchy**; Object **identifier**

Classification Codes:

723.3 (Database Systems); 723.1 (Computer Programming); 723.2 (Data Processing); 903.3 (Information Retrieval & Use); 722.1 (Data Storage, Equipment & Techniques)

723 (Computer Software); 903 (Information Science); 722 (Computer Hardware)

72 (COMPUTERS & DATA PROCESSING); 90 (GENERAL ENGINEERING)

14/5/13 (Item 13 from file: 8)
DIALOG(R) File 8: Ei Compendex(R)
(c) 2003 Elsevier Eng. Info. Inc. All rts. reserv.

02870900 E.I. Monthly No: EI9003027750

Title: Modification of a multilevel indexed **descriptor** file .
Author: Ito, Tetsuro; Nakashima, Makoto
Corporate Source: Univ of Library and Information Science, Tsukuba-shi,
Jpn

Source: Information Systems v 14 n 4 1989 p 317-326

Publication Year: 1989

CODEN: INSYD6 **ISSN:** 0306-4379

Language: English

Document Type: JA; (Journal Article) **Treatment:** T; (Theoretical)

Journal Announcement: 9003

Abstract: Multilevel **indexed** descriptor files have many advantages, such as fast **retrieval** of exact-, partial- and/or approximate-matches, easy file organization and record insertion, and little storage requirement for **indexes** . They, however, have a potential problem that a file search may need backtracking, i.e. the examination of more than one block at some level, even for **retrieving** exact-matches. This paper discusses a method of modifying the existing file structure so as to cope with this problem. The proposed modification algorithm copies the records requiring backtracking into new blocks from which each of them can be **retrieved** by examining only one block at any level. Also the copy operation does not involve additional costs for records not requiring backtracking. Computational experiments obtained from various generated and real-world data show that the algorithm can be implemented easily and work effectively. (Author abstract) 16 Refs.

Descriptors: *DATA PROCESSING--*File Organization; COMPUTER PROGRAMMING--Algorithms

Identifiers: MULTILEVEL **INDEXED** DESCRIPTOR FILES; BACKTRACKING

Classification Codes:

723 (Computer Software)

72 (COMPUTERS & DATA PROCESSING)

14/5/16 (Item 1 from file: 202)
DIALOG(R)File 202:Info. Sci. & Tech. Abs.
(c) 2003 EBSCO Publishing. All rts. reserv.

3500555

The shadow uniform resource locator : standardizing citations of electronically published materials.

Author(s): DiCarlo, Joseph V (jdicarlo@stanford.edu); Pastor, Xavier; Markovitz, Barry P

Corporate Source: Stanford University, Stanford, CA 94304 ; University of Barcelona, Spain ; Washington University, St. Louis, MO

Journal of the American Medical Informatics Association vol. 7, no. 2
, pages 149-151

Publication Date: Mar/Apr 2000

ISSN: 1067-5027

Language: English

Document Type: Journal Article

Record Type: Abstract

Journal Announcement: 3502

Citation of scientific materials published on the Internet is often cumbersome because of unwieldy uniform resource **locators** (URLs). Describes a format for URLs that simplifies citation of scholarly materials. Its use depends on a simple hypertext markup language (HTML) device, the "refresh page." Uniform citation would follow this format: [Author I. Title of article. Http://domain/year/month-day(e#).html]. The HTML code for such a page is: <HTML> <head> <meta HTTP-EQUIV="Refresh" CONTENT="0; URL= http://Actual-URL/ for-article/ referred-to/ in-citation.html"> </head> </HTML>. The code instructs the browser to suppress the content of the refresh page and bring up the title page of the cited article instead. Citations would be succinct and predictable. An electronic journal would not need to **alter** its existing **file hierarchy** but would need to establish a distinct domain name and maintain a file of refresh pages. Concludes that utilization of the "shadow" URL would be one step closer to truly universal resource **locators** .

Descriptors: Citations; Codes; Hypertext; Electronic publications

Classification Codes and Description: 4.08 (Coding, Compacting)

Main Heading: Information Recognition and Description

14/5/17 (Item 2 from file: 202)

DIALOG(R) File 202:Info. Sci. & Tech. Abs.
(c) 2003 EBSCO Publishing. All rts. reserv.

0600343

The thesaurofacet: a multipurpose retrieval language tool.

Author(s): Aitchison, Jean

Journal of Documentation vol. 26, no. 3, pages 187-203

Publication Date: September 1970

ISSN: 0022-0418

Language: English

Document Type: Journal Article

Record Type: Abstract

Journal Announcement: 0600

A description is given of the english electric thesaurofacet, a faceted classification and thesaurus covering engineering and related scientific, technical, and management subjects. A noval feature of the system is the integration of the classification schedules and thesaurus. Each term appears both in the thesaurus and in the schedules. In the schedules the term is displayed in the most appropriate facet and hierarchy: the thesaurus supplements this **information** by indicating **alternative hierarchies** and other relationships which cut across the classified arrangement. The thesaurus also controls word forms and synonyms and acts as the alphabetical **index** to the class numbers. The resulting tool is multipurpose, as easily applicable to shelf arrangement and conventional classified card catalogs as to co-ordinate **indexing** and computerized **retrieval** systems. The reasons are given for modifying certain traditional facet techniques, including the choice of traditional disciplines for main classes, the lack of a built-in preferred order, and the use, in certain instances, of enumeration rather than synthesis to express multi-term concepts. Methods of application of the thesaurofacet in pre-coordinate and post-coordinate systems are discussed and a brief account is given of the techniques employed in its compilation.

Classification Codes and Description: 4.07 (Classification, **Indexing** , and Thesauri)

Main Heading: Information Recognition and Description